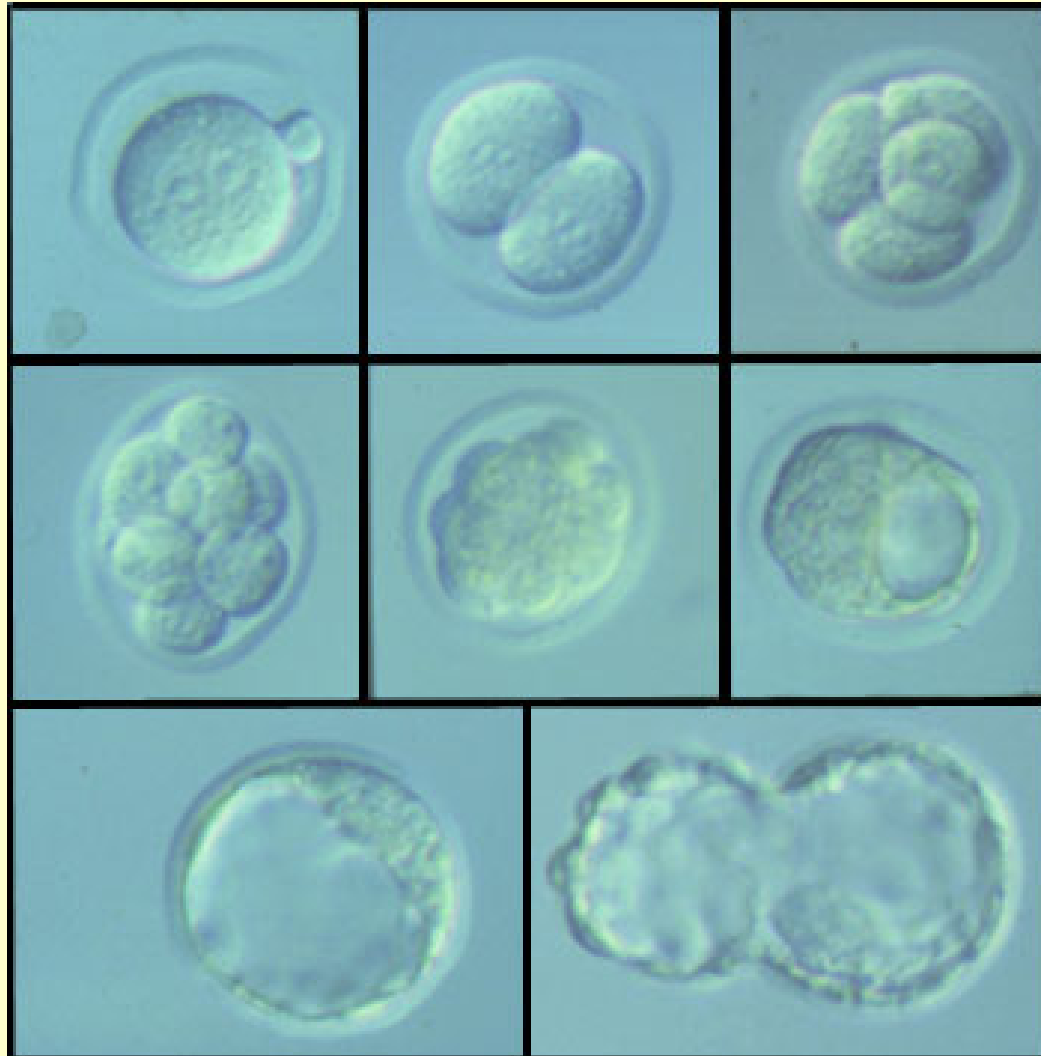


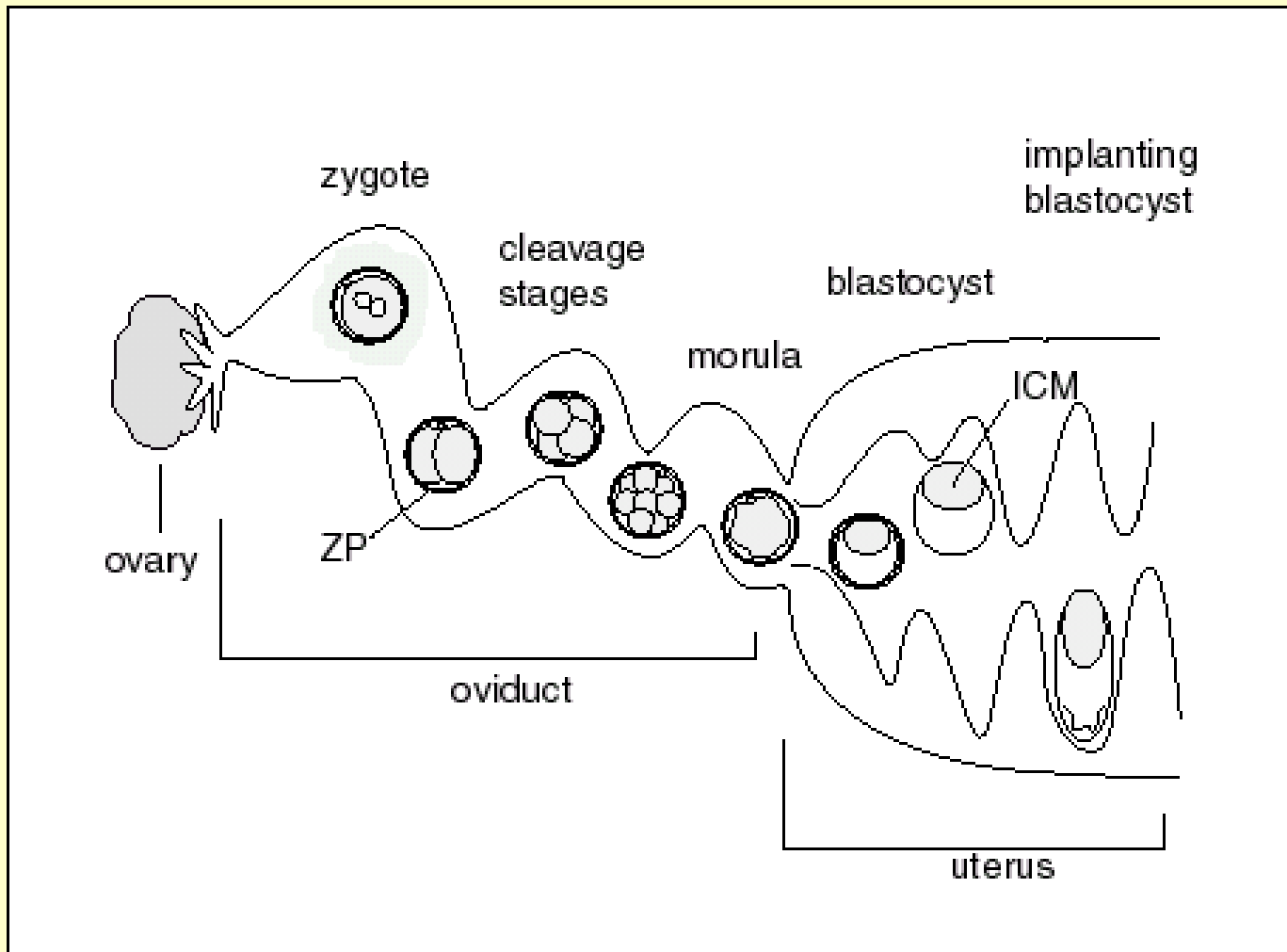
Mammalian Development

- Cellular and morphological level
- Genetic control of development
- Developmental potential

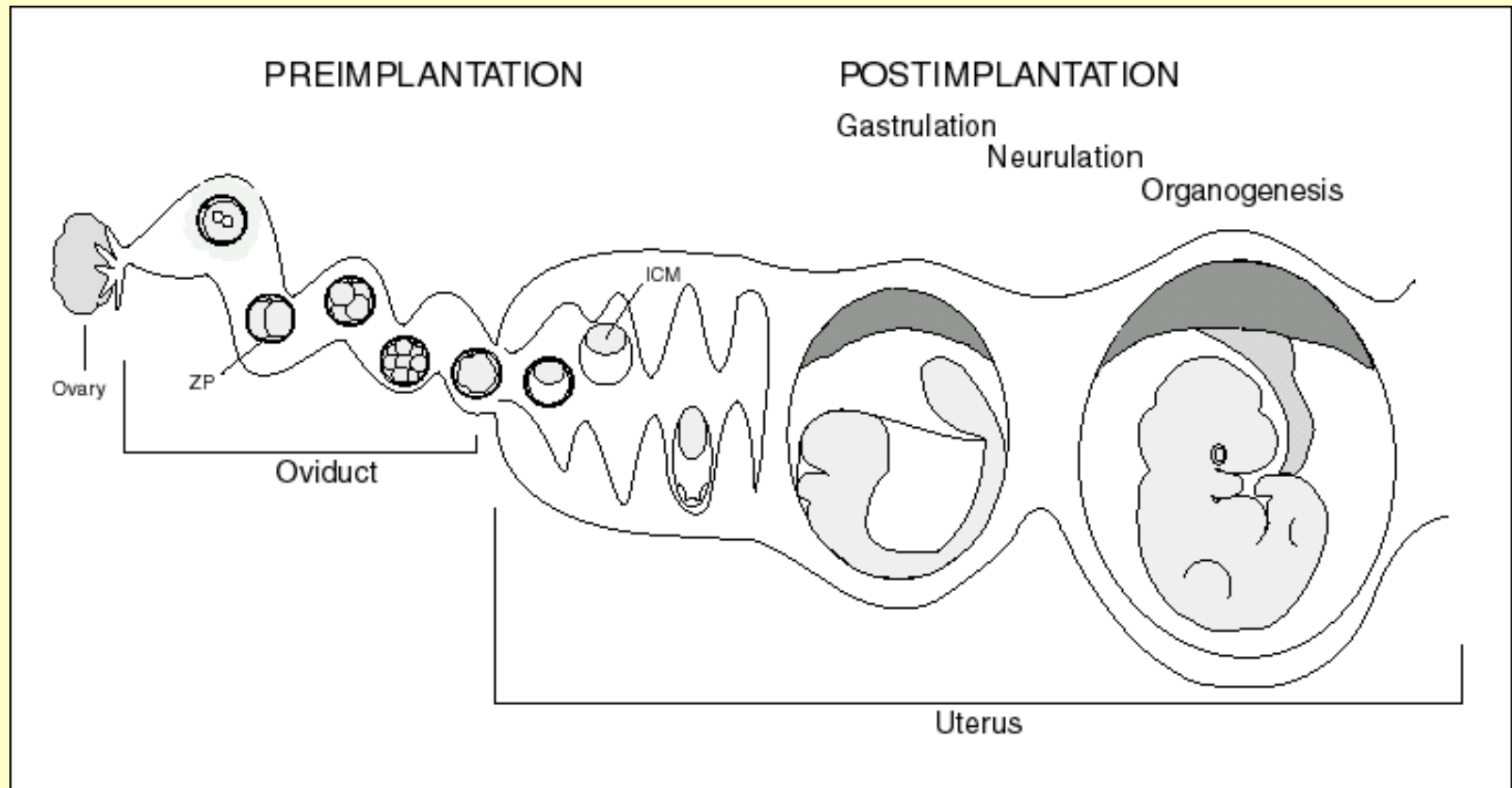
Preimplantation development: zygote to hatching blastocyst



Early Mammalian Development



Pre- and Postimplantation Development



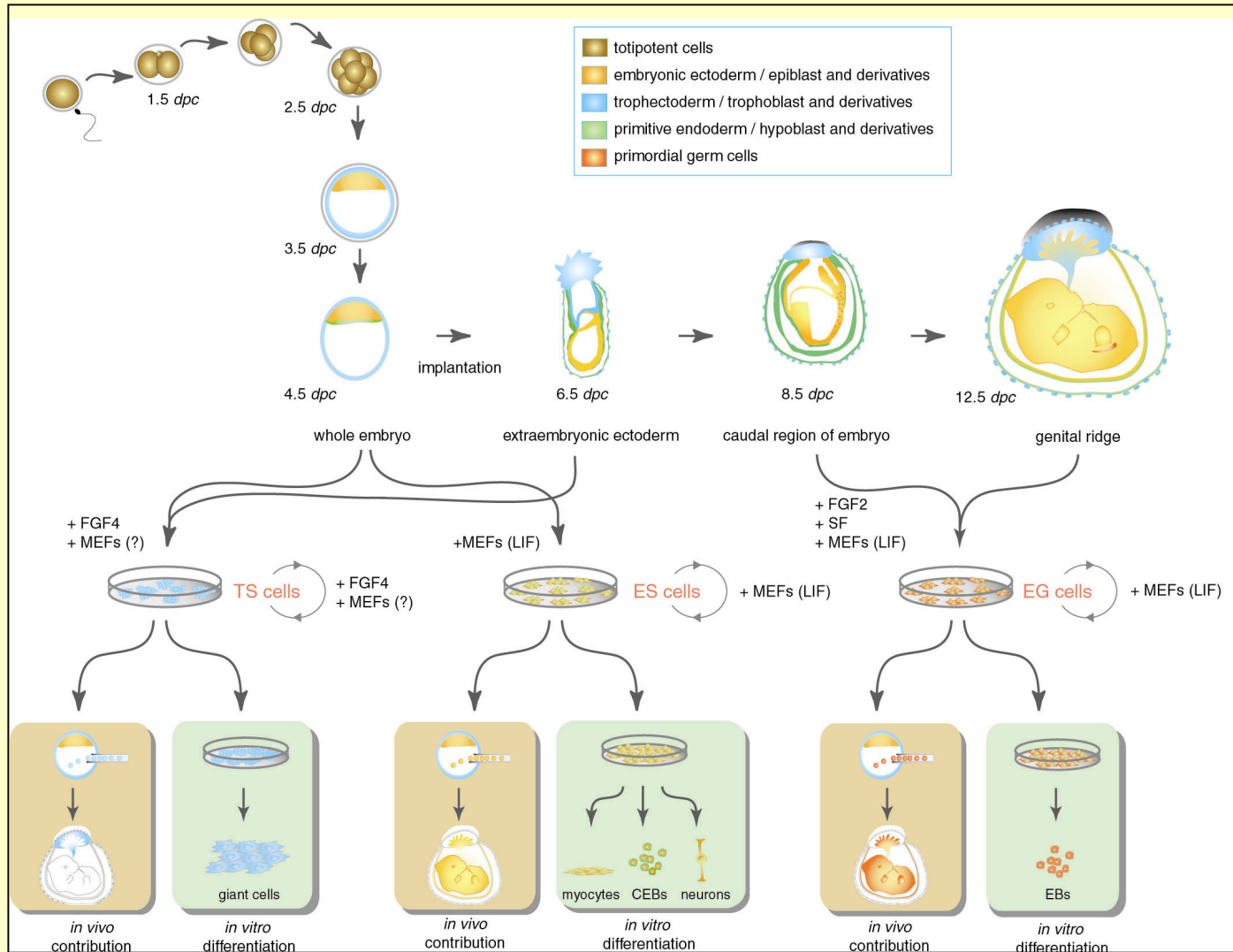
Genetic Control of Development

- Nuclei from gametes
- Mitochondria
- Activation of zygotic genome
- Epigenetic effects
 - X-chromosome inactivation
 - Imprinting

Developmental Potential

- Cellular potential
- Nuclear potential

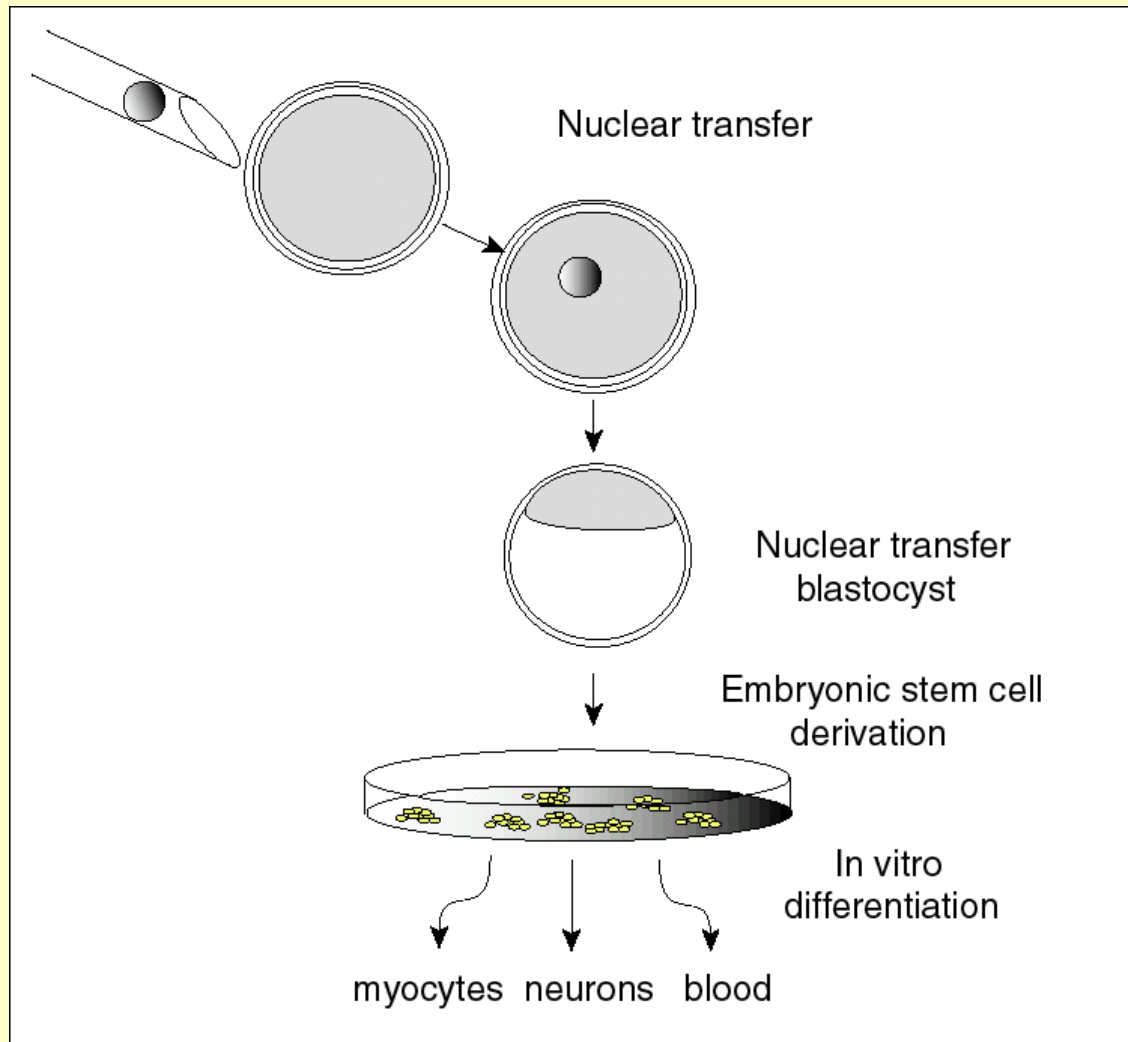
Embryonic Stem Cells



Developmental Potential

- Cellular potential - stem cells
- Nuclear potential - cloning

Embryonic Stem Cells from Cloned Embryos



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